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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,707	08/10/2001	Motoo Nishihara	DP-804 US	4268
466	7590	08/09/2005	EXAMINER	
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			BLOUNT, STEVEN	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/925,707

Applicant(s)

NISHIHARA, MOTOO

Examiner

Steven Blount

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 10, 16 - 18, 23 - 34, 43 - 48, 49 - 51, 55 - 56, 62 - 65 is/are rejected.
- 7) ☒ Claim(s) 11 - 15, 19 - 22, 35 - 42, 49, 52 - 54, 57 - 61 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 49 is objected to because of the following informalities: in line 2, the word "upper" should be replaced with "user". Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 10, 16 – 18, 23 – 34, 43 – 48, 55 - 56, and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,570,883 to Wong in view of the applicants admitted prior art (hereinafter AAPA).

With regard to claim 1, Wong teaches frame transfer devices 1 wherein logical paths are maintained in each of the devices such that logical paths which vary with the user traffic ("consumption of resource" - see col 4 line 8. See also col 3 lines 55+ and col 6 lines 60+ and col 6 lines 43+). Wong also teaches that the packets are assigned queue priority in col 6 lines 50+. Fixed frame lengths of user traffic with respect to the synchronous frames is taught in col 4 lines 48+, and a scheduler for forming a transfer schedule with respect to each path is taught in col 4 line 45 and also col 8 lines 7+.

Wong does not, however, teach connecting the frame transfer devices by using a plurality of physical channels, as stated in the preamble of claim 1.

AAPA, on page 1, lines 11+, states that WDM uses plural OCH's to connect a network system to another network system as a means for increasing the transmission capacity.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have connected the frame transfer device end members of Wong using a WDM system, including a plurality of physical channels connecting the two members together, in light of the teachings of AAPA, in order to provide a means for increasing the data throughput between these two members in an effective manner.

With regard to claim 2, note the use of WDM.

With regard to claim 3, it would be obvious to use the same number of physical paths as logical paths.

With regard to claims 4 and 6, see member 12, which essentially evenly distributes the flows.

With regard to claim 5, a frame restoration processor would be obvious in order to provide a means for forming packets out of the frames, in view of the fact that the packets are used to form the frames as described in col 6 lines 30+.

With regard to claim 7, note the use of buffers in member 2 of figure 1.

With regard to claim 8, the examiner takes Official Notice that padding data fields is well known in the art.

With regard to claim 9, having no path frame formed when there is no user packet to be transferred would be obvious.

With regard to claim 10, a timer is mentioned in col 11 lines 43+.

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With regard to claim 16, switch 12 is essentially a frame relaying processor.

With regard to claim 17, see control input terminal processor 10 (col 2 line 63) and bit rate allocator (col 3 line 8).

With regard to claim 18, see the previously mentioned bit rate allocator.

With regard to claim 23, see the discussion of the system above.

With regard to claims 24 – 30, see the rejections above.

With regard to claims 31 – 32, see col 3 line 6 (bit rate allocator) and col 2 line 63.

With regard to claims 33 - 34, see the bit rate allocator.

With regard to claim 43, see the rejection of claim 1, and note that a system is formed between the two end users.

With regard to claims 44 – 48, see the rejections above.

With regard to claim 55, see the bit rate allocator discussed above.

With regard to claim 56, see the discussion of retransmission on page 2, lines 13+.

With regard to claim 62, note retransmission is discussed in AAPA. See page 2, lines 13+.

4. Claims 49 – 51 and 63 - 65 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,570,883 to Wong in view of the applicants admitted prior art as applied above to claims 1 – 10, 16 – 18, 23 – 34, 43 – 48, 55 - 56, and 62, and further in view of U.S. patent 5,140,582 to Tsuboi et al.

With regard to claim 49, Wong/AAPA teach the invention as described above, but do not explicitly teach the step of restoring the frames to user packets. This is taught in Tsuboi et al. See col 25, lines 40+.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have restored the packets from the frames in Wong/AAPA, in light of the teachings of Tsuboi et al in order to allow the information to be processed in the system in packet form by such instruments as packet switches.

With regard to claims 50 - 51, see the buffer and switch in Wong.

With regard to claim 63, see the rejection of claim 49, and note that many of the devices in Wong and Tsuboi et al can be considered to be "relay devices", including member 2 in Wong and member 4 in Tsuboi et al (see fig 2).

With regard to claims 64 – 65, see the buffers and switch in Wong as discussed above (also note the use of buffers in Tsuboi in figure 2).

5. Claims 11 – 15, 19 – 22, 35 – 42, 52 – 54, and 57 - 61 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to include the limitations of the base claim and any intervening claims.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Blount whose telephone number is 571 - 272 - 3071. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Chau Nguyen, can be reached on 571 – 272 - 3126. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ajit Patel
Primary Examiner

SB



8/3/05